

Initials	Line number (e.g. 17)	Clause/ Subclause (e.g. 3.1)	Paragraph/ Figure/ Table/ (e.g. Table 1)	Type of comment ²	Comments	Proposed change	Observations of the secretariat
Standard 1				Ge	<p>We regard that this "Standard" should be referred to as a "Guideline" of IWSFG.</p> <p>We are opposed to establishing it as the standard.</p> <p>In addition, we are also against the exclusion of regenerated cellulose fibers from the beginning which was based on misinterpretation and misconception.</p> <p>Although we oppose this Standard as stated above, we provide the following comments on rayon (Regenerated Cellulose fibers).</p>	<p>Change the Name "Guideline"</p> <p>Rename this document as "Guideline."</p>	
PAS1	99	7.2		Ge, Te	<p>The "substrates" in this section should be deleted, since the basic principle stating that plastic lacking biodegradability must not be used, is found in the test procedures.</p>	<p>The "substrates" in this section should be deleted.</p>	
Standard 1 & PAS 1	235 103	7.1.3 7.2.2		Ge, Te	<p>7.1.3,7.2.2 [Regenerated Cellulose Fibers]</p> <p>Rayon is regenerated cellulose fibers made mainly from wood pulp.</p> <p>Therefore, it has a superior biodegradability, and easily decomposes by the bacteria on the ground and in the soil. Even in the event of incineration, it does not produce toxic gas.</p> <p>The rayon, grown as a plant and returned to nature, has not had a major impact on environmental pollution. It is highly safe and also has broadly been used, being acknowledged as eco-friendly recyclable fiber .</p>	<p>Section of Standard-1(7.1.3) and PAS-1(7.2.2) should be deleted.</p>	

¹ Adapted from the ISO/IEC Commenting template. ² Te = Technical, Ge = General, Ed=Editorial

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					<p>Unlike plastic fiber or synthetic fiber such as polyester or nylon fiber, rayon has been identified as a fiber equivalent to pulp in an academia.</p> <p>Hence, section Standard-1 7.1.3 and PAS-1 7.2.2 should be deleted to avoid restricting the use of regenerated cellulose fibers without sufficient scientific rational behind.</p> <p>Regenerated cellulose fibers should be treated equally to pulp in this guideline with following reasons</p> <p>(1) [Confusion between plastic and regenerated cellulose] Throughout this paper, regenerated cellulose has been treated the same as microplastic which is seen as a potential cause to ruin aquatic food chain. Plastics and regenerated cellulose are completely different material from different origin, and various environmental properties such as biodegradability are also completely different. Regenerated cellulose should not be considered in the aposition with plastic.</p> <p>(2) [Pulp used for rayon and toilet paper] It has excellent biodegradability with minimal environmental effect to wastewater. The difference comes from the degree of refinement between pulp and rayon. Rayon</p>		

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					<p>has a higher degree of refinement than pulp, and it biodegrades more rapidly. We completely disagree to restrict regenerated cellulose while, allowing pulp to be contained in wastewater, as rayon biodegrades faster than pulp.</p> <p>(3) [Biodegradability of Regenerated Cellulose Fibers (Rayon)] Regenerated cellulose fibers made from wood pulp have superior biodegradability than pulp which is used as papermaking material. This is because regenerated cellulose fibers have superior biodegradability with a short cellulose chain length, less crystalline, and contain less insoluble impurities.</p> <p>(4) [Regenerated cellulose fibers (rayon) contain little insoluble substance] Rayon is made from pulp which has the highest purity among wood pulp. The rayon fiber is fiber refined from the cellulose of pulp and it contains very little amount of impurities. It contains less impurities and insoluble matter than toilet paper. Also, cellulose has never been identified as a substance that can be categorized as plastic even after refinement, even academically, ever since rayon was introduced.</p>		

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					<p>(5) [Non-toxicity of rayon fiber] No oral toxicity has been found in single dose oral toxicity tests on rats.</p> <p>(6) [Potential contamination from laundry wastewater]</p> <p>It seems that comments on laundry wastewater were made based on wrong interpretation; selectively targeted only rayon while the presence of other fibers such as synthetic fiber are not clearly demonstrated, and microplastic, microfiber and regenerated cellulose are treated as equivalent. With above reasons, we disagree to prohibit the use of regenerated cellulose as substrate.</p>		
Standard 1	235	7.1.3		Ge,Te	Biodegradability of fibers should be addressed through PAS 5A, 5B. if products can pass biodegradability test, why do we need to set restriction on use of Regenerated cellulose fibers?	Delete	
PAS 1	119	7.2.3		Ge, Te	<p>7.2.3 [Test Method] In this test, it is not correct to identify "regenerated cellulose fibers that are made of plastic" as "synthetic".</p>	Please delete "regenerated cellulose fibers that are made of plastic" as "synthetic".	

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IWSFG Template for Reviewer comments and IWSFG secretariat observations¹

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